



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,844	07/03/2001	Edward T. Hessel	0444-4083US1	1464
27123 7590 11/07/2008 MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101				
EXAMINER				
MCAVOY, ELLEN M				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
11/07/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com

Shopkins@Morganfinnegan.com

jmedina@Morganfinnegan.com

# Office Action Summary

**Application No.**

09/898,844

**Applicant(s)**

HESSELL ET AL.

**Examiner**

Ellen M. McAvoy

**Art Unit**

1797

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3, 5, 16, 18, 20, 22, 24, 26 and 27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 3, 5, 16, 18, 20, 22, 24, 26 and 27 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/8/2008; 9/2/2008.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submissions: an information disclosure statement, a Declaration under 37 CFR § 1.132, and remarks, filed on 02 September 2008, have been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 16, 18, 20, 22, 24, 26 and 27 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Waddoups et al (6,333,298) in combination with either Dressler et al (4,604,491) or Ho et al (5,254,274), and in further view of Le et al (5,602,086).

Applicants' arguments filed 02 September 2008 have been fully considered but they are not persuasive. As previously set forth, Waddoups et al ["Waddoups"] disclose a molybdenum-free lubricating oil composition exhibiting improved fuel economy and fuel economy retention properties which comprises (a) a base stock oil compound of at least 50 wt.% mineral oil, the base stock oil having a viscosity of 4.0-5.5 mm<sup>2</sup>/s at 100°C, 95 wt.% or more saturates, 25 wt.% or less naphthenics, a NOACK volatility of 15.9% or less, a kV of 4.0-5.5 mm<sup>2</sup>/s at 100°C, and a

viscosity index of at least 120; (b) at least one calcium detergent and (c) at least one organic friction modifier. See column 1, lines 30-45. Waddoups teaches that the base stock oil should contain 50%-100% by weight of a hydrocarbon mineral oil, and that blends of hydrocarbon mineral oil and synthetic oils are suitable so long as the base stock oil used to prepare the lubricating oil compositions has the properties set forth above. Waddoups teaches that the preferred base stock oils are (a) Group III base stocks or (b) blends of Group III base stock oils with Group I, Group II or Group IV base stocks. Examples of other base stock oils of lubricating viscosity which may be blended with the hydrocarbon mineral oils to form the base stock oil useful in the invention include alkylated polyphenyl synthetic oils. See column 1, line 50 to column 2, line 42. Applicants' invention differs from Waddoups by specifying that the synthetic oil blended with the Group III base oil is an alkylated naphthalene which is alkylated by at least two C<sub>6</sub> to C<sub>30</sub> alkyl chains. However, such synthetic base oils are known in the art as evidenced by Dressler et al ["Dressler"] and by Ho et al ["Ho"].

Dressler discloses synthetic base oils for functional fluids and greases comprising a mixture of monoalkylated naphthalenes and polyalkylated naphthalenes represented by the formula in column 1, lines 20-28, wherein the R groups are independently selected from H, methyl, and a 12-26 carbon atom alkyl. Dressler teaches that the synthetic naphthalene oils may be used for preparing lubricants, hydraulic fluids and other functional fluids. See column 2, lines 15-22. The examiner maintains the position that the alkylated naphthalenes of Dressler meet the limitations of the alkylated naphthalene component of the claims. Ho teaches aromatic compounds alkylated with C<sub>20</sub> to C<sub>1300</sub> olefinic oligomers to produce synthetic lubricant base stocks and additives for lubricants. Ho teaches that the alkylated aromatic products have the

structure set forth in column 3, lines 35-58, wherein polyalkylated naphthalenes are found in the second formula. The examiner maintains the position that the polyalkylated naphthalenes of Ho meet the limitations of the alkylated naphthalene component of the claims. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have blended the polyalkylated naphthalene synthetic oils of either Dressler or Ho with the lubricating oil composition of Waddoups. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation relied on by the examiner is the disclosure in Waddoups allowing for the addition of synthetic base oils to the composition such as alkylated polyphenyls. Naphthalenes are an example of polyphenyls. Further, Le et al ["Le"] is added to show that alkylated aromatic base fluids, such as alkylated naphthalenes, are known to be blending stocks with other lubricating base oils such as polyalphaolefin base fluids.

Applicants argue that Waddoups requires the presence of a calcium detergent, and independent claim 3 and claims dependent thereon are directed to a composition "consisting essentially of" Group III base oils and an alkylated naphthalene. Thus, applicants argue, the use of the transitional phrase "consisting essentially of" specifically excludes the required calcium detergent of the Waddoups patent. This is not deemed to be persuasive because the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed

invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The examiner is of the position that the addition of a calcium detergent to the lubricating oil compositions of the claims would not alter the basic and novel characteristics of the invention as a lubricant composition which “exhibits additive solvency and superior thermal and hydrolytic stability compared to base oils either alone or blended with esters, while maintaining seal swell characteristics similar to blends of base oils and esters.” Specification page 3, third paragraph. Further, as set forth in MPEP 2111.03, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising.” See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355.

Applicants point to the Declaration under 37 C.F.R. 1.132 of Dr. Edward T. Hessel which demonstrates that the addition of Waddoups required calcium detergent adversely affects the water separation properties of a base III oil and alkylated naphthalene composition. The Declaration has been carefully considered; however, the examiner maintains the position that the examples set forth in the Declaration are not persuasive in excluding the calcium detergent component of Waddoups from the claimed compositions. First, the claims at issue are directed towards a composition, and not to the method of using the composition in an environment wherein the water separation property is an essential property. The examiner is of the position that this is an important point because water is not required to be present in the claimed compositions and the claimed compositions are not required to be used in environments or processes where water is present. With no water present, the water separation property of the Group III base oil and the alkylated naphthalene synthetic oil is an irrelevant point. Further, the

results presented in the Declaration pertain to one calcium detergent, an overbased calcium sulfonate which is preferred by Waddoups; however, the calcium detergent of Waddoups may be neutral or overbased, and may comprise calcium phenates, salicylates, sulfonates or mixtures thereof. See column 2, lines 45-62. It is not clear that the other calcium detergents taught as suitable in Waddoups also have the same results in the property of water separation in a composition containing a Group III mineral base oil and an alkylated naphthalene. Additionally, the examples in the Declaration (Example Comp. A, Example Comp. B and Example Comp. C) add 0.72 weight percent of overbased calcium sulfonate detergent to the composition and applicants argue that “the concentration of the overbased calcium sulfonate was adjusted to the minimum value as specified in Waddoups patent, column 3, line 32-34 (0.112% calcium).” However, Waddoups broadly teaches that the calcium detergent may be added to the composition in amounts ranging from 0.5 to about 5 weight % and that the resulting composition contains from about 0.058 to 0.58 weight % calcium, preferably about 0.112 to 0.42 weight %, of calcium from the calcium detergent.

Applicants point to the enclosed Hunter Declaration and argues that it unequivocally establishes for the record that one of ordinary skill in the art would understand that water separation is a basic and novel characteristic of the claimed invention. Applicants argue that any additive which materially affects the water separation (demulsibility) of a composition as claimed in claim 3 is specifically excluded from the scope of the claim by virtue of the “consisting essentially of” language. This is not deemed to be persuasive because there is no indication in the specification or the claims as originally filed that the basic and novel characteristics of the claimed composition of a Group III base oil and alkylated naphthalene is

water separation, i.e., when water is present in the composition in any amount, the Group III base oil and alkylated naphthalene do not form an emulsion with water after about 60 minutes.

Applicants appear to be arguing that the property of water separation (the formation of an water-in-oil emulsion) of any mixture of any lubricant composition containing any two or more lubricating oils is a basic and novel characteristic of such an invention to one of ordinary skill in the art. This is not deemed to be persuasive because not all lubricant compositions are used in water-containing environments, and it appears that the addition of a conventional demulsifier would be obvious to one of ordinary skill.

Applicants argue that the Hunter Declaration also establishes for the record that other calcium detergents taught as suitable in Waddoups do have the same results in the property of water separation in a composition containing a Group III mineral base oil and an alkylated naphthalene. This is not deemed to be persuasive because to be of probative value, any objective evidence should be supported by actual proof. See e.g., *In re Huang*, 100 F.3d 135, 139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed.Cir. 1984). The examiner is of the position that applicants assertions that all of the additional calcium detergents taught as suitable in Waddoups do have the same results in the property of water separation in a composition containing a Group III mineral base oil and an alkylated naphthalene constitute mere argument which do not take the place of objective evidence. A showing of results must be based on evidence, not argument or speculation. *In re Mayne*, 104 F.3d 1339, 1343-44, 41 USPQ2d 1451, 1455-56 (Fed. Cir. 1997).



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/

Ellen M McAvoy  
Primary Examiner  
Art Unit 1797

EMcAvoy  
November 3, 2008

Application/Control Number: 09/898,844  
Art Unit: 1797

Page 9